

REMARKS

Claims 26-44 remain pending in the application, with Claims 26, 36-39, and 41 being independent. The claims have not been amended herein.

Claims 26, 27, 29-32, 34, and 36-44 were rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent Application Publication No. 2003/0068571 (Uehara et al.) in view of U.S. Patent No. 4,673,303 (Sansone et al.). Claims 33 and 35 were rejected under § 103 over Uehara et al. and Sansone et al. and further in view of U.S. Patent No. 6,059,407 (Komatsu et al.). These rejections are respectfully traversed.

As recited in independent Claim 26, for example, the present invention relates an image forming method including steps of performing hydrophilic treatment for making a surface of an intermediate transfer body hydrophilic by applying energy to the surface of the intermediate transfer body, applying a liquid for reducing the fluidity of ink on the intermediate transfer body having the surface on which the hydrophilic treatment has been performed, forming an image by ejecting the ink from an ink jet head on the intermediate transfer body on which the liquid has been applied, and transferring the image formed on the intermediate transfer body to a recording medium.

If ink is ejected onto a non-processed intermediate transfer body, the ink would be repelled by the surface of the intermediate transfer body, resulting in an image of poor quality and visibility. Further, without making the intermediate transfer body hydrophilic, a reacting liquid would be repelled by the intermediate transfer body and, if ink is applied thereto, the area factor of the ejected ink would be diminished, resulting in an image with stripes and unevenness. With the above method, on the other hand, by making the surface of the intermediate transfer body hydrophilic, the liquid (reacting liquid) for reducing the fluidity of ink will be less prone to being repelled by the intermediate transfer body. This can enable an even distribution of the

reacting liquid, which, in turn, can enable desired placement of the ink on the intermediate transfer body. As a result, a high quality image with a high area factor and without stripes and unevenness can be formed on the intermediate transfer body for subsequent transfer to a recording medium.

Uehara et al. is directed to an image forming method and apparatus in which a charger 18 charges an intermediate transfer body medium (belt) 16, a developing device 20 adheres resin particles to the intermediate transfer medium charged by the charger to form a resin particle layer 8, and an ink jet recording device jets ink from recording head 30 to the resin particle layer. The ink is retained in cavities in the resin particle layer to record an image. A transfer and fixing device 46 applies heat and pressure to the resin particle layer to transfer and fix the resin particle layer 8 to recording medium 34.

While Uehara et al. employs a charging treatment to the belt 16 to adhere resin particles to the belt, such cannot be considered a hydrophilic treatment. Moreover, between the hydrophilic treatment and ejecting ink to form an image, Uehara et al. does not apply a liquid for reducing the fluidity of ink, but rather the resin particles. Because resin particles are used, there is no need to make the belt in Uehara et al. hydrophilic.

Accordingly, Uehara et al. fails to disclose or suggest at least performing hydrophilic treatment for making a surface of an intermediate transfer body hydrophilic, applying a liquid for reducing the fluidity of ink on the intermediate transfer body having the surface on which the hydrophilic treatment has been performed, and forming an image by ejecting ink from an ink jet head on the intermediate transfer body on which the liquid has been applied, as is recited in independent Claim 26. Nor does Uehara et al. disclose or suggest at least performing plasma processing on a surface of an intermediate transfer body, applying liquid for reacting with ink or coagulating a colorant of ink on the intermediate transfer body having the surface on which the

plasma processing has been performed, and forming an image by ejecting ink from an ink jet head on the intermediate transfer body on which the liquid has been applied, as is recited in independent Claims 36 and 37. Further, Uehara et al. does not disclose or suggest at least applying a liquid for reducing the fluidity of or reacting with ink on an intermediate transfer body on which hydrophilic treatment has been performed, and forming an image by ejecting ink from an ink jet head on the intermediate transfer body on which the liquid has been applied, as is recited in independent Claims 38, 39 and 41.

Thus, Uehara et al. fails to disclose or suggest important features of the present invention recited in the independent claims.

Sansone et al. is directed to printing in a postage meter. Element 138 can direct appropriate rays or fluid material toward the surface of drum 16 so as to modify the characteristics of the ink after it has been applied. As understood by Applicants, the fluid material discharge by Sansone et al. is for so-called coating processing. Accordingly, one of ordinary skill in the art would not utilize a post-ink applying liquid in Sansone et al. to replace the pre-ink applying resin particles of Uehara et al. Moreover, Applicants submit that the charging treatment in Uehara et al. would not apply to a liquid material. Accordingly, if the resin particles in Uehara et al. were replaced with a liquid material, then the charging treatment in Uehara et al. would become irrelevant. Thus, one of ordinary skill in the art would not look to Sansone et al. to modify the teachings of Uehara et al.

Komatsu et al. has also been reviewed, but is not believed to remedy the deficiencies of the citations noted above with respect to the independent claims.

Thus, Claims 26, 36-39, and 41 are patentable over the citations of record. Reconsideration and withdrawal of the § 103 rejections are respectfully requested.

For the foregoing reasons, Applicant respectfully submits that the present invention is patentably defined by independent Claims 26, 36-39, and 41. Dependent Claims 27-35, 40 and 42-44 are also allowable, in their own right, for defining features of the present invention in addition to those recited in their respective independent claims. Individual consideration of the dependent claims is requested.

Applicants submits that the present application is in condition for allowance. Favorable reconsideration, withdrawal of the rejections set forth in the above-noted Office Action, and an early Notice of Allowability are requested.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

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